

ploded this theory. It has been frequently observed that complete suppression of the urine is not necessarily followed by symptoms of uremia, and that symptoms of uremia make their appearance when an excess of urea does not exist in the blood. That urea in excess in the blood is productive of no deleterious results while the kidney is in active operation, is a fact well established by experiments on animals. And it is only when the functions of the kidney are interfered with or abolished that death takes place.

It is not my intention to detain you with the numerous theories which have from time to time been advanced concerning this train of symptoms, but to search with you for the cause of headache, blindness, nausea, anemia, and general debility attendant upon chronic nephritis. It would appear that poisoning by urea alone is not the solution of this problem. It is a very popular and recent theory that the above symptoms are caused by an interference with the functions of the kidney, which lead to a disturbance of the regular chemical changes in all parts of the body. These changes are followed by a change in the nutrition of the tissues, which is manifested by a loss of weight and strength, anemia, and disordered functions of the brain. While this explains, in a general way, it avoids a direct issue, and leaves us still hunting for the specific cause of these distressing and dangerous symptoms.

By reason of the loss of albumin and the thinning of the blood stream, hypertrophy of the left ventricle is said to increase the blood pressure in the arteries. It has been suggested, and appears consistent with these symptoms, that if by any accidental circumstance the blood pressure is suddenly increased, or the blood stream further thinned, edema is increased, which edema may involve brain tissue, as well as lungs, serous cavities, or cellular tissue. The form of the attack will vary according to the portion of the brain which becomes edematous. If the cerebral hemispheres alone are involved, the patient becomes comatose, convulsions without coma, if the central portions are involved, and both convulsions and coma, if central and cortical portions are involved.

WANTED:—By a young physician, an opportunity to substitute for a few months.

DR. C. E. BUCHANAN,  
West Lebanon, N. H.

## A CASE OF HYPOSPADIAS THROUGH FIVE GENERATIONS. 16.

By T. J. Strong, M. D., of Burlington.

During five years' service in the U. S. Army, both in the tropics and this country, the writer saw several cases of hypospadias among soldiers, all more or less interesting and all coming under observation for treatment for specific urethritis either acute or chronic.

The history of these cases was of no particular interest, the abnormality being congenital, and as far as can be remembered now, extending over not more than one or two generations. All cases refused operative interference. The location of the meatus was different in all cases—in some posterior to the coronal sulcus and in others on the glans penis at varying distances from the end. The openings were small in some and larger in others. No great difficulty was experienced in urinating (except the "ardor urinae" attendant upon the acute cases of urethritis), and the one disagreeable feature presented itself in the treatment, it being somewhat more difficult to give an irrigation or injection than in a normal penis. However the cases progressed favorably, one necessitating a meatotomy, the opening kept dilated by straight conical steel sounds.

As above stated, these cases presented nothing of a particular interest beyond the fact that there was no opening in the penis in any one of them in its normal situation and if the writer remembers correctly, no sign or indentation where the meatus should have opened normally. A case has recently been seen which presents an interesting family history showing heredity through five generations of this abnormality. A careful perusal of literature relating to abnormalities of this kind does not reveal any such length of time. The case is herewith presented in its entirety:

R. P., soldier, Fort Ethan Allen, Vt., age 21, unmarried. Called at office for treatment for gonorrhoea.

Previous History. Diseases incident to childhood, no serious illness. About one year ago contracted gonorrhoea and claimed he was cured in ten days. Closer questioning elicited the fact that he noticed once in a while a "morning drop." Seven or eight months ago after sexual intercourse he had a profuse purulent discharge from his penis and took "cap-

sules" and other medicines internally but no injections or local treatment.

Present History: Claims to have a discharge from urethra and at times a burning sensation on urination—these constituting practically all his symptoms.

Examination: Patient has a purulent discharge from the meatus, which is situated about half-way from end of penis to the corona glandis. Penis is normal in shape and at the end is an indenture where the normal opening should be. Below this and leading to the meatus is a slight furrow or groove in the median line. The pus was secured and examined and showed numerous gonococci. The opening in the penis looked nearly downward and patient stated he generally held his penis out straight to urinate to avoid soiling his clothing. He was asked if he was born with that condition to which he replied in the affirmative and then stated the following curious family history: His great grandfather, grandfather, father and three brothers were all affected in the same way. Although he said that he had never seen his greatgrandfather's nor grandfather's penis, he had been told the above facts. He had seen however, his father's and three brothers organs, and one of them was "worse" than his own. He had one brother who had escaped the affliction, and to cap the curious state of affairs said a brother who was married (had hypospodias) had a child who "had the same thing," thus making five generations in direct descendency with a hypospodias.

The urethritis was treated by irrigations—no stricture was present—a bent glass nozzle being inserted into the abnormal meatus more easily than a straight one. The case progressed favorably and owing to inability of the patient to come for office treatment as often as desired he took the alternative—use of injections—at his quarters, and only recently reported to say that he was rapidly improving.

## BULLET WOUNDS OF THE INTESTINE.

*Report of a Case by E. W. Melville, M. D., of St. Albans, Vt.*

On Tuesday, Mar. 6 at 4 P. M., C. H. S., a brass moulder, while examining a 38 calibre Smith & Wesson revolver, shot himself about the centre of a triangular space, whose apices

were the pubis, the umbilicus and the left anterior superior spine of the crest of the ilium. That the weapon was held against the belly, was proven by the fact that the clothing and flesh of the abdomen were burned. Patient passed immediately into a state of collapse, from which he rallied somewhat by 6 P. M. aided undoubtedly, by saline enemas and hypodermics of strychnine, glonoïn and atropine. Removed to hospital at 7 P. M. and usual preparation given for an abdominal section. The condition of the patient was by this time excellent; he was able to get out of bed without assistance and walk some distance to the urinal. While the surgical stage was being reached a second shaving and scrubbing of the abdomen was done.

The incision was made with the bullet wound as a centre, down through the peritoneum, and the descending colon carefully drawn out of the six inch incision. Four punctures were found, which were closed by purse string sutures of medium sized catgut, the openings inverted into the lumen of the bowel, by a probe and the suture drawn tight. The whole damaged area was now turned in and held by an uninterrupted catgut ligature, and the mesentery drawn over all. The whole peritoneal cavity was of course flooded with fecal material, but no further openings were found. No search was made for the bullet. Several gallons of hot sterile saline solution were poured into the peritoneal cavity, until it returned perfectly clear. The peritoneum was now sewed up by an uninterrupted catgut suture, the different sets of muscles were treated likewise, and the skin by interrupted silkworm gut. A piece of iodoform drainage tape was left in the lower angle of the wound. His recovery was almost without incident. The tape was taken out on the second day, the skin sutures on the fifth day. The opening made by the tape was all closed on the twelfth day. He was given two grains of calomel on the day following the operation, which was very effectual. His temperature reached 100° on two occasions but soon reached and remained normal. It was necessary to use the catheter for three days following the operation. He was discharged from the hospital, on the twenty-first day, and within a month from the date of the accident was again at work. Drs. Gibson and Arnold assisted me at the operation.